

14/3
462

NORTHAMPTONSHIRE COUNTY COUNCIL

INSTITUTE OF SOCIAL
MEDICINE
10, PARKS ROAD,
OXFORD

Annual Report

OF THE

MEDICAL OFFICER
OF HEALTH

FOR THE YEAR

1941

NORTHAMPTONSHIRE COUNTY COUNCIL



Annual Report

OF THE

MEDICAL OFFICER
OF HEALTH

FOR THE YEAR

1941



CONTENTS.

	<i>Pages</i>		<i>Pages</i>
Adulteration, etc.	22	Maternity Homes, Emergency	16
After Care—Tuberculosis	35	Maternity and Nursing Homes	9
Ambulance Facilities	8	Measles	27
Ante-Natal Services	10, 16	Meat and other Foods	22
Area	4, 6	Mental Deficiency	15, 19
Births	4, 14, 39	Methylene Blue Reductase Test	7
Boarded-out Children	15	Midwifery and Maternity Services	8
Cancer	28	Midwives	8, 9
Census, 1931	4	Milk—Accredited Producers Scheme	21
Cerebro-Spinal Fever	28	Milk—Examination of	7, 21
Chicken-pox	27	Milk—Graded	7, 21
Child Life Protection	15	Milk in Schools	8, 26
Clinics and Treatment Centres ... 10, 14, 15, 32		Milk—Public Health Regulations	22
Deafness and Deaf-Mutism, Prevention of ...	15	Milk—Supply of Free Milk	14
Deaths	4, 39	Milk—Tuberculous	26
Dental Treatment	15	Milk and Dairies Acts and Orders	21
Diarrhoea	27	Milk (Special Designations) Orders, 1936 and 1938	7, 21
Diphtheria	27	Nursing in the Home	9, 28
Diphtheria Immunisation	28	Obstetric Facilities	15
Dispensary Work—Tuberculosis	32	Ophthalmia Neonatorum	10
Drainage and Sewerage	20	Orthopædic Treatment	15
Dysentery	28	Pneumonia	28
Educational and Social Work	38	Polio-Encephalitis	28
Encephalitis Lethargica	28	Poliomyelitis	28
Enteric Fever	27	Populations	4, 6
Erysipelas	27	Propaganda (Venereal Diseases)	38
Food—Inspection and Supervision of	21	Public Health Act, 1936—Section 307 (1) ...	20
Food and Drugs Act, 1938	22	Puerperal Pyrexia	4, 10
Government Evacuation Scheme	16	Residential Nurseries	17
Health Propaganda	38	Rushden House Sanatorium	34
Health Services, General Provision of	7	Sanitary Circumstances	20
Health Visiting	14	Scarlet Fever	27
Home Helps	16	Smallpox	27
Hospital Accommodation	27	Social Hygiene	38
Hostels (for Difficult Evacuee Children) ...	18	Statistics and Social Conditions	3, 4, 39
Housing	20	Tuberculosis	29
Infant Mortality	4, 5, 39	Unmarried Mothers, Institutional Provision for	15
Infant Welfare Centres	13, 14	Vaccination	27
Infectious and Other Diseases, Prevalence of and Control over	27, 43	Venereal Diseases	35
Influenza	28	Veterinary Inspection of Dairy Cows ...	21
Laboratory Facilities	3, 7	Vision, Defective	15
Maternal Mortality	5, 9, 39	Water Supply	20
Maternity and Child Welfare	8	Whooping Cough	27
Maternity Beds in Institutions	10		

NORTHAMPTONSHIRE COUNTY COUNCIL.

COUNTY HEALTH DEPARTMENT,
GUILDHALL ROAD,
NORTHAMPTON.

October, 1942.

To the Chairman and members of the Northamptonshire County Council.

MR. CHAIRMAN, MY LORDS, LADIES AND GENTLEMEN,

I have the honour to present the Forty-Fifth Annual Report of the County Medical Officer of Health for the year 1941.

In so far as vital statistics can be taken as indices of the health of a community, a study of the mortality rates for 1941 reveals that, in the county, there has been no deterioration in the second year of the war. The general death rate, 11.9, is lower by 1.1 per 1,000 of the population compared with the previous year; the infant mortality rate is slightly lower, 48.1 per 1,000 births as compared with 48.3 in 1940 and the tuberculosis death rate, 0.50 per 1,000, is the second lowest on record. All the available evidence goes to show that, by and large, the health of the country as a whole was maintained in 1941 and the same is certainly true of Northamptonshire. The results, however, must not be regarded too complacently. Although the tuberculosis death rate is comparatively low, the number of primary notifications shows an ominous increase, from 194 in 1940 to 265 in 1941. The maintenance of a vigorous anti-tuberculosis campaign is especially required in war time and I am happy to report that the activities of the Council are strongly supported by the Voluntary Care Committees established in practically all the boroughs and urban districts in the county.

Cerebro-spinal fever, an acute infection which rises promptly under war conditions, was notified in respect of 28 cases, the same number as in the previous year, but only 8 cases proved fatal as compared with 14 in 1940. There was a considerable reduction in the incidence of enteric fever from 210 cases in 1940 to 48 cases. Measles was less prevalent with 4,276 cases as against 6,273, but whooping cough notifications increased from 487 in the previous year, to 1,464. Scarlet fever also showed an increase, there being 425 cases notified compared with 341 but the infection was mild; only one death was reported. Diphtheria notifications fell from 180 to 123 cases, of which 11 proved fatal. Deaths due to all forms of pneumonia remained comparatively high for recent years with 154 as against 164 in 1940.

The health services of the county were fortunately kept at their pre-war level, as it was possible to retain an adequate professional staff. The chief new development was the inauguration of a scheme for the prevention of diphtheria, the results of which are that, by the end of the year, 5,558 children under five years, and 21,216 of school age had received injections of prophylactic material. Diphtheria is a serious and often fatal disease, particularly in early childhood; death from the disease can be prevented by protective treatment and modern methods of publicity to educate the public of this fact are needed.

An extension of the venereal diseases scheme was effected by the opening on 6th November of a new clinic in the recently constructed out-patient department of the Kettering and District General Hospital. Another development which requires mention was the establishment on 1st June, 1941, of a branch of the Emergency Public Health Laboratory Service under the Medical Research Council at the Northampton General Hospital. The laboratory affords a wide service of diagnostic facilities for use in connection with the diagnosis of infectious diseases and also undertakes bacteriological examination of water supplies.

Attention should also be directed to the outspoken report of the County Analyst which refers in some detail to the output at flood level of worthless food substitutes and to the effective measures of control.

If, for the remaining years of the war, I am able to report as satisfactory vital statistics as in 1941, and to record that the services have been as well maintained, I shall be more than content.

I have the honour to be,

Your obedient Servant,

CHARLES MILLIKEN SMITH,
County Medical Officer of Health.

SECTION A.

Statistics and Social Conditions.

1(a). GENERAL STATISTICS FOR THE YEAR.

Area of the Administrative County	*578,947 acres
Population (Census 1921)	211,509
(Census 1931)	217,133
(Estimated resident population, middle of 1941)	259,820
Number of inhabited houses (Census 1921)	50,538
(Census 1931)	57,047
Number of families or separate occupiers (Census 1921)	52,286
(Census 1931)	58,964
Rateable Value (April 1st, 1941)	£1,226,215
Actual product of a penny rate 1940-1941 (whole area)	£4,849/1/2

* Subsequent to the extension of the boundaries of the County Borough of Northampton, on April 1st, 1932.

1(b). VITAL STATISTICS.

	TOTAL	MALE	FEMALE	BIRTH-RATE per 1,000 of the estimated population.
Live births (Legitimate)	3,356	1,713	1,643	13.51
" " (Illegitimate)	155	80	75	
				Rate per 1,000 Total (Live and Still) Births.
Still-births	117	67	50	32.24
				DEATH-RATE per 1,000 of the estimated population.
Deaths	3,103	1,558	1,545	11.94†
				Rate per 1,000 Total (Live and Deaths. Still) Births.
Deaths from puerperal causes :—				
Puerperal and post abortion sepsis			2	.51
Other Puerperal causes			5	1.28
Total			7	1.79
Death-rate of infants under one year of age :—				
All infants per 1,000 live births				48.08
Legitimate infants per 1,000 legitimate live births.....				47.93
Illegitimate infants per 1,000 illegitimate live births				51.61

† See next page.

Deaths from	(a) Cancer (all ages)	454
	(b) Measles (all ages)	7
	(c) Whooping Cough (all ages)	13
	(d) Diarrhoea (under 2 years of age)	4

The birth rate of 13.5 is lower by .4 per 1,000 of the population than the rate for the year 1940, and is also lower by .7 than the rate for England and Wales (14.2) which is the lowest recorded, being .2 below the previous lowest reached in 1933.

Similarly, the death rate (11.9) is lower by 1.1 per 1,000 of the population as compared with the previous year, and is also lower by 1.0 than the rate for England and Wales.

The birth rate exceeded the death rate by 1.6 per 1,000 of the population.

The seven chief causes of death accounted for 67.8 per cent. of the total deaths, and are led by heart disease (23.6), cancer (14.6), intracranial vascular lesions (11.6), bronchitis (5.8), pneumonia (5.0), nephritis (3.8), and tuberculosis of respiratory system (3.4). The first five causes of death occupy the same relative position as in the year 1940.

The number of deaths associated with childbirth amounted to seven as against eleven in the year 1940.

The Maternal Mortality Rates per 1,000 live and still births during the last five years have been as follows :

	1937	1938	1939	1940	1941
Administrative County (Number of Deaths)	2.17 (7)	2.41 (8)	1.13 (4)	3.02 (11)	1.79 (7)
England and Wales	3.13	2.97	2.82	2.16	2.23

The infant mortality rate per 1,000 births (48) is the same rate as for the year 1940, and two above the average for the previous ten years ; it is, however, 11 below that for England and Wales for the year 1941. The illegitimate infant mortality rate is 38 lower than the rate for the year 1940. The infant mortality rates per 1,000 births during the last ten years have been as follows :

Infant Mortality Rate:	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941
Administrative County	45.5	42.0	57.2	50.6	47.9	43.8	41.1	40.4	48.3	48.1
England and Wales	65	64	59	57	59	58	53	50	55	59

† *Nett Death-Rate.*

It is not possible to give the nett death rate for the year 1941. The Registrar-General, in his Memorandum with regard to statistics for the year 1941, states : " The variety and magnitude of local population movements and the uneven incidence of civilian war deaths have together, combined to frustrate the attempt to secure comparability between local death rates by the use of Areal Comparability Factors and the preparation and issue of such factors are being suspended under present conditions."

2. AREA AND POPULATION.

There has been no change in the area of the Administrative County during the year 1941.

In his memorandum with regard to statistics for the year 1941, the Registrar General states that " populations . . . are given for calculation of Death Rates or the incidence of notifiable diseases amongst civilians. Estimates of the numbers and distribution of the non-civilian population are not available and the birth rate can only be based on the civilian population of 1941 as used for death rates."

On this basis the civilian population of 1941 for the Administrative County is estimated by the Registrar General to be 259,820.

SECTION B.

General Provision of Health Services.

1. LABORATORY FACILITIES.

The following is a summary of the work done in the County Laboratory during the year 1941

No. of milk samples examined (Methylene Blue Test)	5,690
No. of milk samples examined (Phosphatase Test)	112
Total number of samples examined	5,802

The totals for years 1933-40 were 459, 760, 1,491, 1,533, 2,429, 3,100, 4,074 and 5,694 respectively.

MILK

The 5,802 samples of milk may be classified as follows :

Designated milk	4,236
Non-designated milk	1,386
School milk—raw	68
pasteurised	28
Pasteurised milk	84
	<u>5,802</u>

The following table shows the results of samples (except school milk samples) examined by the Methylene Blue Reductase Test during 1941 :—(Note : Satisfactory—Passed the Methylene Blue Test. Not Satisfactory—Failed to pass the Methylene Blue Test.)

SAMPLES OF DESIGNATED MILK—			SAMPLES OF NON-DESIGNATED MILK		
Month	Number examined	Percentage Satisfactory	Number examined	Percentage Satisfactory	Total Samples
January	327	89	83	84	410
February	349	89	79	89	428
March	371	86	123	84	494
April	350	89	155	80	505
May	427	87	120	78	547
June	314	51	102	50	416
July	390	24	151	29	541
August	355	48	85	46	440
September	349	53	142	46	491
October	405	71	130	63	535
November	312	88	85	72	397
December	287	86	131	78	418
TOTAL	4236	71	1386	65	5622

Total samples of Designated Milk taken during 1940	4,024	} 5% increase.
Total samples of Designated Milk taken during 1941	4,236	

It will be noted from the above table that, of the 4,236 samples of Designated milk, 71% complied with the requirements of the Orders. In the case of non-designated samples examined 65% were satisfactory. There is no statutory test for cleanliness of non-designated milk and in its absence the standards described in my 1938 report are still in force in this County. The 1,386 samples submitted by District Councils are classified below and compared with the two previous years :

NON-DESIGNATED MILK SAMPLES.						
	1939		1940		1941	
	No.	Per cent.	No.	Per cent.	No.	Per cent.
GOOD	785	69.9	888	61.9	906	65.4
MODERATE	147	13.1	282	19.6	270	19.5
BAD	191	17.0	264	18.4	210	15.1
TOTALS	1123	—	1434	—	1386	—

School Milks.

There were 96 samples of milk collected from schools of which 28 were pasteurised. Of the 68 raw milk samples, 27 passed the Methylene Blue Test : of the pasteurised milk samples, all were submitted to the Phosphatase Test, of which 20 were satisfactory.

Pasteurised Milk.

The phosphatase test is still being carried out for the examination of pasteurised milk and has completely replaced the Plate Count. In addition to the 28 school milk samples mentioned above, 84 samples submitted by District Councils were examined by the Phosphatase Test, of which 7 failed to pass.

Water.

The bacteriological examination of all water samples has been carried out at the Emergency Public Health Laboratory, Northampton General Hospital, owing to its services being extended in view of war-time conditions.

2. AMBULANCE FACILITIES.

These were described in the 1938 report.

3. MATERNITY AND CHILD WELFARE.

This section of the report, in so far as it deals with Midwives and Maternity and Nursing Homes, refers to the whole Administrative County. In respect of other Maternity and Child Welfare services since the Borough of Kettering is a separate Maternity and Child Welfare Authority, details of its Welfare work will be found in the Report of the Medical Officer of the Borough.

(i) MIDWIFERY AND MATERNITY SERVICES.

Midwifery Services.

The number of cases attended by midwives employed by District Nursing Associations in pursuance of Section 1 of the Midwives Act, 1936, was as follows :

	1940	1941
Cases attended as midwives	1165	1220
Cases attended as maternity nurses	1040	998
TOTAL	2205	2218

The midwives attended 97.49 per cent. of the total notified births in the County—69.43 per cent. as midwives and the remainder as maternity nurses, including births of non-residents in maternity homes, etc.

The number of midwives in independent practice at the end of the year was 25.

56 nurses were employed by the County Nursing Association for emergency duty and to relieve temporarily during holidays, sickness, etc.

(ii) NURSING IN THE HOME.

Under an agreement between the County Council and the County Nursing Association for the provision of special nurses in certain cases of infectious disease, 22 cases of puerperal pyrexia, 38 of whooping cough, 4 of ophthalmia neonatorum, 62 of measles, and 32 cases of infantile diarrhoea were nursed in the home. Nursing care was also given in a number of other cases not strictly provided for in the agreement, including 93 cases of pneumonia and 243 of influenza. These figures do not include evacuees.

(iii) MIDWIVES.

The Supervisor of Midwives (who is also County Superintendent and Secretary of the Northamptonshire Nursing Association) and her staff made 330 routine visits and 233 special investigations.

The number of midwives practising in the area at any time during the year was 196 ; on December 31st, 138 remained in practice. Of the latter, 6 were employed at the County Maternity Home, Kettering, 72 by the Northamptonshire Nursing Association, 4 at Kettering and District General Hospital, one at Brackley Cottage Hospital, 30 in emergency maternity homes, 3 in private nursing homes and 22 in private practice.

An Order under Section 33, paragraphs (1) and (2) of the Emergency Powers (Defence) Regulations, 1939, was made in respect of one midwife, who had surrendered her certificate under sub-section (1) of Section 5 of the Midwives Act, 1936.

No uncertified person was reported as having practised during the year.

Medical Aid to Midwives. During the financial year, the midwives notified that they had called in medical aid in 654 cases and 333 claims for payment of fees were dealt with from medical practitioners whose assistance had been sought, as against 660 notifications and 393 claims in the previous year ; the above figures include evacuees.

(iv) MATERNITY AND NURSING HOMES.

The number of homes on the register during the year was 5, one of which was closed in February, and 14 visits of inspection were paid by the Assistant Medical Officer. In addition, 11 inspections were made to midwives in Kettering and District General Hospital and Kettering Public Assistance Institution. One application for Registration of a Nursing Home and one application for exemption from Registration received during the year were granted.

The registered homes in the County at the time of reporting were (unless otherwise stated) :—

1. " Bethel Nursing Home," Kettering Road North, Northampton.
2. " Woodfield Nursing Home," 36, Wellingborough Road, Finedon.
3. " Burnside Nursing Home," Brackley.
4. " Newlyn Nursing Home," 90, Rockingham Road, Kettering (Maternity only).
5. Lower Addingtons, Evenley.

(v) MATERNAL MORTALITY (excluding Kettering Borough).

The Registrar-General reported 6 maternal deaths, two of which were from sepsis.

Sepsis.

1. *Pelvic Peritonitis*. Patient died in hospital. Ante-natal care undertaken by doctor, no information available. Admitted as emergency.
2. *Multiple emboli. Puerperal Pyrexia*. Miscarriage. Died in hospital. Admitted as septic abortion (Inquest).

Other causes.

3. *Eclampsia*. Died in hospital. Ante-natal care carried out by doctor and midwife. Admitted as an emergency.
4. *Obstetric Shock, obstructed labour*. Died in hospital. Doctor responsible for ante-natal care. Admitted in state of collapse. Died undelivered.
5. *Post partum haemorrhage, necrosis of liver*. Died at home. Attended ante-natal clinic. No abnormality noted. Consultant attended after delivery.
6. *Obstetric shock. Caesarian Section*. Toxæmia of pregnancy. Died in hospital. Referred to consultant by own doctor for cæsarian section. Admitted for ante-natal treatment of toxæmia.

In addition the following deaths were investigated :

1. *Pulmonary Embolism*. Patient died at home. Attended ante-natal clinic.
2. *Uraemia, Eclampsia and accidental haemorrhage*. Died in hospital. Ante-natal care carried out by doctor and midwife. Admitted as emergency.
3. *Pneumonia and pregnancy 8½ months*. Died at home. Attending own doctor during pregnancy. Died day after delivery.

The death rate per thousand live and still births was 1.95. The rate for England and Wales was 2.23 per thousand live and still births.

Puerperal Pyrexia. 27 notifications were received (excluding Kettering Borough), 14 of the notified cases were treated in hospital ; there were no deaths among the notified cases.

(vi) OPTHALMIA NEONATORUM.

Five cases were notified (excluding Kettering Borough) all of which recovered without impairment of vision : one case was treated in hospital.

All cases were visited by the Assistant Medical Officers.

(vii) MATERNITY HOSPITALS.

The cases admitted under the arrangements of the Public Health Committee during the year were :

County Maternity Home, Kettering	111
Kettering and District General Hospital	32
The Barratt Maternity Home, Northampton General Hospital	159
Stamford, Rutland and General Infirmary	1
Market Harborough and District Hospital	—
Hospital of St. Cross, Rugby	5

In addition, 1 case was admitted to the Bedford County Maternity Hospital, 1 to St. Edmund's Hospital, Northampton, and 98 normal residents were admitted to Emergency Maternity Homes.

The total number of cases admitted to hospital under the County arrangements was 408, compared with 259 in 1940 and 221 in 1939.

(viii) ANTE-NATAL CLINICS.

At the end of the year there were 11 Ante-Natal Clinics. Three additional ante-natal clinics were provided for evacuee mothers, all of which were open at the end of the year.

Ante-Natal Clinics were held weekly at Northampton, Wellingborough, Rushden, Corby and East Haddon, and monthly at Byfield, Thrapston, Brackley, Welford and Daventry. New clinics were opened at Towcester, 3rd Friday, 2 p.m., at Wesley Chapel Rooms, and in July at Kettering, 2nd and 4th Wednesdays, 1.30 p.m., at London Road Hospital, for County cases which had previously attended Kettering Borough Ante-Natal Clinic. Clinics for evacuee mothers for St. John's Emergency Maternity Home continued to be held at Guildhall Road on Mondays and Thursdays, and at Norton Hall for Bragborough Emergency Maternity Home, on Mondays.

The following statistics relate to ante-natal clinics under the control of the County Council. (Figures in respect of evacuee women are included.)

ANTE-NATAL CLINICS.

	1940	1941
No. attending for first time	1,428	2,331
Total Ante-Natal attendances	3,458	7,985*
No. sent to hospital :		
For consultation	63	125
„ confinement (abnormality)	56	134
„ confinement (lack of accommodation)	515	740
„ Ante-Natal treatment	17	19
„ Ante-Natal treatment and confinement	20	81
„ Ante-Natal treatment and miscarriage	—	2
No. treated on district (confinement)	644	636
No. treated on district (miscarriage)	4	5

* This figure includes a number of women who made their first attendance in 1940.

The total number of women, including evacuees, attending all ante-natal clinics was 2,559 or 70.3 per cent. of the total notified births.

CASES TERMINATED.

	1940	1941
Alive Full Time	1174	2163
Premature	32	64
Stillborn, Full Time	18	49
Premature	6	11
Abortion or miscarriage	5	5
Left district	100	140
Not Pregnant	8	18
Not terminated	303	381
Twin birth	11	32
Triplets	1	—
Maternal death	4	2

Consultative Ante-Natal Clinics are held weekly at Northampton General Hospital and fortnightly or weekly if required at Kettering and District General Hospital by Mr. R. Watson, the Council's Consultant Obstetrician.

Details of cases seen at these Clinics are as follows :—		Northampton General Hospital.	Kettering and District General Hospital
(a) No. of sessions		52	45
(b) No. of expectant mothers referred to Consultant Obstetrician by medical practitioners and examined by him in a consultative capacity at the Clinic		97 and 44 evacuees	66
(c) No. of patients recommended for admission on account of abnormalities and supervised at the Ante-Natal Clinic (exclusive of cases entered under (b))		140 and 8 evacuees	Information not available
(d) No. of cases recommended for admission on account of unsatisfactory home conditions and supervised at the Clinic...		52	do.
(e) Total No. of expectant mothers who attended at the Clinic during the year		341	72
(f) Total attendances of all cases at the Clinic		1237	261

INFANT WELFARE CENTRES.

NAME OF CENTRE.	AVERAGE NO. OF INFANTS ATTENDING PER SESSION.	AVERAGE NO. OF CONSULTATIONS PER DOCTOR'S ATTENDANCE	ATTENDANCES BY DOCTOR.	SESSIONS.
Brackley	38	25	10	11
Brixworth	37	18	9	10
Burton Latimer	29	21	11	21
Byfield	20	18	21	22
Cold Ashby	27	13	11	11
Corby	24	17	40	44
Cottingham	8	7	11	11
Daventry	25	20	18	24
Desborough	20	15	11	20
Duston	18	17	22	23
Earls Barton	20	18	10	20
Finedon	19	18	17	18
Hackleton	30	17	10	10
Higham Ferrers	40	25	11	21
Irchester	21	16	11	22
Irthlingborough	32	23	11	11
Long Buckby	15	10	10	10
Moulton	35	11	11	11
Potterspury	25	24	11	11
Raunds	23	13	11	11
Rothwell	23	19	11	22
Rushden	83	31	48	48
Towcester	22	21	11	11
Wellingborough	42	28	44	44
Wilbarston.....	10	10	11	11
Wollaston	22	18	11	22
Woodford	16	14	11	11

(ix) MILK GRANTS.

The total quantity of milk supplied by the Council amounted to 21 liquid gallons as compared with 5,168 liquid gallons and 403½ pounds of dried milk in the previous year. The County scheme has been almost entirely superseded by the National Milk Scheme introduced by the Government in 1940.

(x) NOTIFICATION OF BIRTHS.

The numbers of births notified in the area during the year under Section 203 of the Public Health Act, 1936, were as follows :

Live births, 3,549 ; Still births, 75 ; Total, 3,624.

Notified by midwives	3,295
Notified by doctors and parents	329

(the above figures include births of non-residents in maternity homes, etc.)

(xi) INFANT WELFARE CENTRES.

At the end of the year there were 27 Infant Welfare Centres in the County. The Table on page 13 shows details of the activities carried out at each Infant Welfare Centre in the County. Some difficulty was experienced in maintaining the attendance at the smaller rural centres on account of lack of transport facilities. In addition, some of the premises in which the centres were held were taken over by Government departments and alternative premises had to be found.

1,273 children under one year attended Infant Welfare Centres for the first time, representing 42.7 per cent. of the total registered live births.

The total number of attendances at all Infant Welfare Centres during the year by children under one year of age was 8,047, and by children between the ages of one and five years, 7,719, showing a decrease of 360 attendances on the figures of the previous year.

(xii) HEALTH VISITING.

At the end of the year the staff consisted of 21 Health Visitors and one Superintendent. Three additional Health Visitors were loaned from evacuation areas. The following is a short summary of the work of the Health Visitors (excluding school nursing) :

HEALTH VISITORS' VISITS.

1. Ante-Natal	270
2. Infants	28,073
3. Children 1-5 years	33,159
4. Infant Deaths	121
5. Still births	48
6. Infant Life Protection	522
7. Boarded out (P.A.C.)	289
8. Tuberculosis cases	3,056
9. Mental Defectives	541
10. Special visits	810
11. Social Visits	559
	<hr/>
	67,448
	<hr/>

In addition, the Health Visitors made 805 attendances at the Infant Welfare Centres and gave 18 lectures to the mothers.

3,251 first visits were made by Health Visitors to children under one year of age, representing 91.6 per cent. of the total notified live births. (The first visits are shown as a percentage of total notified live births because it is more accurate than taking registered births, since Northamptonshire is a reception area.)

(xiii) CHILD LIFE PROTECTION.

The Health Visitors continued visitation under the provisions of Sections 206 and 220 of the Public Health Act, 1936. Periodical reports have been received upon cases under their supervision. At the end of 1941, 99 foster mothers and 129 children were on the register. During the year, 41 children were removed from the County, 11 were returned to the care of parents or relatives, 7 were removed to an institution, 8 were legally adopted, 8 were transferred to the care of another foster mother in the County, and in 20 cases supervision was discontinued on the child reaching the age of nine years. 522 visits were paid by the Health Visitors during the year. All reports are reviewed by the medical staff, and prompt measures are taken to investigate any case in which an adverse report is received.

(xiv) ORTHOPAEDICS.

The Clinics organised by the Manfield Orthopaedic Hospital continued their valuable work during the year, and cases were referred from time to time by the Medical Officers attending the Infant Welfare Centres. Thirteen children under five years of age were admitted as County Council patients to Manfield Hospital. Ninety-four children suffering from orthopaedic defects were referred to the clinics for treatment.

(xv) MENTAL DEFICIENCY.

The Health Visitors pay routine domiciliary visits to mental defectives who are living in good homes and whose conduct is satisfactory. Other defectives who require special supervision are visited by the Mental Welfare Officer.

(xvi) UNMARRIED MOTHERS.

11 unmarried mothers were admitted to Homes in 1941.

(xvii) PREVENTION OF DEAFNESS AND DEAF-MUTISM.

13 cases have been referred to hospitals for operation.

(xviii) DENTAL TREATMENT AND DEFECTIVE VISION.

During the year, 451* expectant and nursing mothers and 142 children under five years of age who required dental treatment, and 89 children under five who required examination for defective vision, were referred to the Staff of the School Medical Department. In addition, a number of County patients attending the Kettering Ante-Natal Clinic received dental treatment. Assistance towards the cost of dentures was given to 31 mothers.

* 128 of these did not attend for treatment.

(xix) CONSULTANT OBSTETRIC FACILITIES.

The County Council has arrangements with Mr. R. Watson, F.R.C.S.(Ed.) F.R.C.O.G., (Consultant Obstetrician), and his services are available to medical practitioners in cases of abnormality of pregnancy and in puerperal cases. Eleven patients were seen at their homes during the year at the request of private practitioners compared with five in 1940. No cases were officially treated under the arrangements for the Emergency Unit.

(xx) CONTRACEPTION CLINIC.

Twenty-six County cases were seen at the Northampton Women's Welfare Association Clinic.

(xxi) HOME HELPS.

Two cases received assistance under this scheme.

GOVERNMENT EVACUATION SCHEME.

ANTE-NATAL HOSTELS.

Norton Hall.

On account of the difficulty of billeting expectant mothers sent from London for admission to Bragborough Emergency Maternity Home, arrangements were made for part of Norton Hall to be used as an ante-natal hostel. The servants' hall was equipped as a kitchen, various alterations were made to the domestic premises, and accommodation was provided for 28 expectant mothers. Staff was supplied by the Salvation Army and consisted of Matron (S.C.M.), lay helper, a married couple to act as cook and odd-job man. The hostel was opened in September. The patients, who were under the ante-natal care of a temporary assistant medical officer, were conveyed to Bragborough Hall when in labour by the Bragborough gardener.

Watford Court.

The greater part of Watford Court was, after agreement with the owners, taken over as a hostel of 20 beds. Lady Henley undertook to be responsible for the catering and a Matron (S.C.M.) and cook were engaged. It was arranged that, owing to transport difficulties, patients should be admitted to East Haddon Hall Emergency Maternity Home during the day when volunteer cars were available, and to Bragborough Hall at night when they were transported by the gardener. The first patients were admitted in December.

EMERGENCY MATERNITY HOMES.

Bragborough Hall.

Owing to increasing difficulties of billeting and transport of patients at the beginning of the year, expectant mothers were evacuated direct to Bragborough Hall from the middle of February, the two 6 bedded wards on the ground floor being used for this purpose and the three 4 bedded and labour wards were reserved for lying-in cases. This arrangement was far from satisfactory but continued until the ante-natal hostel at Norton Hall (28 beds) was opened in September.

235 patients were admitted (27 from district); 211 babies were born, there were 5 still births and 3 sets of twins. 15 patients were admitted for ante-natal treatment. 4 patients were transferred to the Barratt Maternity Home or St. John's Emergency Maternity Home, 3 suffering from severe toxæmia, and 1 for disproportion. 7 patients were transferred after delivery for rise of temperature.

The following is a summary of the work carried out at the maternity homes up to the end of December, 1941 :

	<i>Bragborough Emergency Maternity Home</i>	<i>East Haddon Emergency Maternity Home</i>	<i>Kettering Emergency Maternity Wards</i>	<i>St. John's Emergency Maternity Home</i>	<i>Total</i>
No. of beds	26	30	20	62	138
No. of patients admitted.....	235	436	229	776	1676
Live babies born—					
Male	106	201	114	323	744
Female	100	173	108	339	720
Total live babies born	206	374	222	662	1464
Stillbirths	5	4	7	21	37
Miscarriages	—	—	—	—	—
Maternal deaths	—	—	—	—	—
Infant deaths	4	1	1	4	10

A special comparison was made regarding the ruptured perineum and forceps rates at the emergency maternity homes (excluding Kettering), during the period, 1st January to 27th December, 1941 :

	<i>Number of cases.</i>	<i>Ruptured Perineum.</i>		<i>Forceps Deliveries.</i>	
		<i>No.</i>	<i>Per cent.</i>	<i>No.</i>	<i>Per cent.</i>
East Haddon Hall	370	44	11.89	3	0.81
Bragborough Hall	211	58	27.49	8	3.79
St. John's	699	112	16.02	29	4.15

It will be noted that the ruptured perineum rate at Bragborough Hall was higher than at East Haddon Hall or St. John's. The number of primiparae patients at Bragborough was 57 per cent. as compared with 63 per cent. at East Haddon and 52 per cent. at St. John's. The admission of a relatively higher proportion of primiparae patients is accordingly not an explanation for the higher ruptured perineum rate at Bragborough Hall. The forceps deliveries rate at St. John's is higher than at the other two homes, but this is due to the fact that most of the potentially abnormal cases are admitted to St. John's. The forceps rate at Bragborough of 3.79 appears to be high.

RESIDENTIAL NURSERY PARTIES.

At the end of the year the following residential nursery parties for evacuee children under five years of age were supervised by medical members of the staff ; the accommodation for children at each nursery is shown in brackets—Fermyn Woods Hall (38), (W.V.S.); Kelmarsh Hall (28) (North Hampstead and St. Pancras Day Nursery); Eydon Hall (26) (Somerstown Nursery School—L.C.C.); Hill House, Wansford (22) (Waifs and Strays Society); Flore House (20) (Waifs and Strays Society); Duncote Hall (28) (London Council of Social Service); St. Paul's Nursery, Thornby Hall (29); Foxhills, West Haddon (30) (Southwark Catholic Rescue Society).

In addition, the Agnes Parr Babies' Home, which was evacuated from London to Eastfields, Rushden, on the 20th February, 1941, was supervised until responsibility was taken over by the L.C.C. in November.

HOSTELS FOR DIFFICULT EVACUEE CHILDREN.

During the year an additional hostel was opened at the Cottage, Great Brington, thus bringing the number of hostels now available for the reception of difficult children to six. The accommodation at all times has been fully taxed and due to the co-operation between the local reception authorities and this Department, the best use has been made of the accommodation, which now totals 106 beds.

The details of the work done is as follows :

HOSTELS—ADMISSIONS AND DISCHARGES DURING YEAR 1941.

<i>Hostel</i>	<i>Admissions</i>	<i>Discharges</i>
Daventry	50	49
Rushden.....	46	35
Burton Latimer	19	22
Northampton	37	29
Wellingborough	11	12
Great Brington	34	9
	<hr/>	<hr/>
TOTAL	197	156
	<hr/>	<hr/>

Considerable difficulty continues to be experienced in obtaining suitable domestic staff, with the result that the Masters and Matrons have been called upon and have most willingly carried out all forms of domestic work.

During the latter half of the year, a Psychiatric Clinic for the investigation and treatment of problem children was established in the Health Department. The medical psychiatry has been carried out by Dr. C. A. Keane, Medical Superintendent of the County Mental Hospital, and Dr. J. S. Thomas, his Deputy. The Social investigations in the field have been carried out by Miss J. M. Hardy, Psychiatric Social Worker, and Mr. A. G. Rose, Probation Officer. My best thanks are due to all these workers for the enthusiasm they have shown in carrying out the work of adjustment amongst difficult evacuee children. Since the inception of this Clinic, there has been most cordial co-operation between the hostel staffs and the social investigators, whilst, in addition, the burden has been lightened to some degree by the help which has been given by the Billeting Officers in the Reception Areas.

The mal-adjusted children admitted to these hostels have brought to light many of the cryptic emotional and social problems associated with the migration of children from evacuation to the reception areas.

4. MENTAL DEFICIENCY.

The number of ascertained cases on the Register at the end of the year was 671.

In Certified Institutions :	<i>Males</i>	<i>Females</i>	<i>Total</i>
Stoke Park Colony	8	4	12
Earlswood	—	1	1
Bromham House Colony	33	40	73
St. Francis' School, Buntingford	1	—	1
Whittington Hall, Chesterfield	—	2	2
Kettering Public Assistance Institution	4	8	12
Wellingborough Public Assistance Institution	6	8	14
State Institutions	6	8	14
<hr/>			
On Licence from Institutions	6	6	12
<hr/>			
Cases under Guardianship	4	1	5
On Licence from Guardianship	—	1	1
<hr/>			
Cases under Statutory Supervision ...	69	49	118
Cases under Voluntary Supervision ...	133	126	259
Cases otherwise " Ascertained "	74	73	147
<hr/>			
Total			671
<hr/>			

Ascertainment Rate, 2·6 per 1,000 population.

Ascertainment.

Fifty-four new cases have been ascertained during the year. Eight cases have been referred to the Mental Deficiency Committee by the County Education Authority and forty-six have been ascertained through the Public Health and Public Assistance Services. The number of Orders made under the Mental Deficiency Acts during the year was nine. One case was removed from a Certified Institution to Rampton State Institution. Orders for detention relating to four defectives lapsed by operation of law during 1941. Four defectives in Certified Institutions have died.

Guardianship.

Five defectives are in the care of guardians supervised by the Brighton Guardianship Society and from the monthly reports received from the Society it would appear that these patients are happy and well cared for. One defective is under Guardianship in the County and receives regular visits from the Mental Welfare Officer and one of the Council's Assistant Medical Officers. One defective under Statutory Guardianship, evacuated to this County from London, is also visited periodically by the Mental Welfare Officer and an Assistant Medical Officer.

Licence.

One female patient is on licence from Guardianship and supervised by the Brighton Guardianship Society. Six male patients are on licence in the County (two working as labourers, one employed by a Co-operative Dairy, one is an under-gardener and two are living at home). Five female defectives are in domestic service. All these patients are visited periodically by the Mental Welfare Officer.

Medical Examinations.

Thirty-two medical examinations by Assistant Medical Officers have been carried out during the year.

Domiciliary Supervision.

Routine visits by the County Health Visitors were made to the defectives under Statutory and Voluntary Supervision in their homes. 1,035 visits and interviews have been paid by the Mental Welfare Officer to the homes of defectives under supervision, guardianship or on licence and where close supervision was considered desirable and special advice or assistance needed.

Home Training.

It is now practically impossible to obtain sufficient supplies of canvas and wool to continue rug-making lessons to defectives living in their homes. Seven defectives have been occupied in this form of handwork and in simple embroidery and have shewn great interest and pleasure in their work.

General.

The Mental Welfare Officer has acted as escort in the conveyance of seven of the patients certified under the Mental Deficiency Acts. Information for Petitions and all other documents has been collected and prepared by the Mental Welfare Officer who has also acted as escort to patients going on licence from institutions and others returning to institutions from licence.

Sixty-five Special Reports on home circumstances for the information of the Board of Control, or Visitors to Institutions, or other Authorities, have been supplied by the Mental Welfare Officer.

There is a long waiting-list of defectives for vacancies in Certified Institutions and greatly increasing difficulty in obtaining beds.

SECTION C.**Sanitary Circumstances of the Area.****1. WATER SUPPLY.****2. DRAINAGE AND SEWERAGE.**

No applications for grants under Section 307 (1) of the Public Health Act, 1936, were received during the year 1941.

SECTION D.**Housing.**

There is nothing of an important nature to report under this Section.

SECTION E.

Inspection and Supervision of Food.

1. MILK SUPPLY.

MILK (SPECIAL DESIGNATIONS) ORDERS, 1936 and 1938.

During the year 1941, the County Council granted 6 Tuberculin Tested and 8 Accredited licences ; in the same period 3 Tuberculin Tested and 21 Accredited milk producers relinquished their licences or removed. At the end of the year there were 31 Tuberculin Tested and 330 Accredited licences in force in the County, a slight increase over the previous year in the case of Tuberculin Tested licences and a slight decrease as far as Accredited licences are concerned. In addition, one licence to bottle Tuberculin Tested milk and one to bottle Accredited milk were granted, making a total at the end of the year of 13 producers licensed to bottle Tuberculin Tested milk and 14 producers licensed to bottle Accredited milk.

Of the 31 Tuberculin Tested herds in the County, 12 were, at the end of the year, entered in the Register of Attested Herds of the Ministry of Agriculture and Fisheries.

There were 4,236 samples of Tuberculin Tested and Accredited milk collected and examined during the year, an increase of 5% over the previous year of which 3,023 (or 71%) were satisfactory : in calculating this percentage, all unsatisfactory samples are taken into account including repeat samples from farms at which the methods of production are not up to standard.

It was necessary to submit to the Special Quorum appointed by the Public Health etc., Committee, reports concerning 3 producers whose methods of production were not satisfactory. The licences of all three producers were suspended without qualification.

NON-DESIGNATED MILK SUPPLIES.

Under the Milk and Dairies Order, 1926, 1,386 samples were taken by District Sanitary Inspectors for examination for bacterial cleanliness by the Methylene Blue Test at the County Laboratory ; these gave the following results :—Good—906 or 65% ; Moderate—270 or 20% ; Bad—210 or 15%.

MILK AND DAIRIES ACTS AND ORDERS.

The following table gives a list of inspections carried out during the year by the Veterinary Inspectors of the Ministry of Agriculture and Fisheries, and shows the number of cows destroyed on account of tuberculous infection :

INSPECTION OF DAIRY COWS

(a) Clinical Inspection :

	<i>No. of Herd Inspections.</i>	<i>No. of cattle examined.</i>	<i>No. of cattle dealt with under the Tuberculosis Order.</i>
“ Tuberculin Tested ” and “ Certified ”			
Herds	59	4792	—
Accredited or Standard Herds	1282	28383	20
Non-designated Herds	1690	21100	35

(b) Tuberculin Testing of "Tuberculin Tested" and "Certified" Herds :
(other than Attested Herds)

No. of cattle tested	4358
No. of Reactors found	48

(c) Tracing sources of tuberculous milk :

No. of cases outstanding from previous quarters	1
No. of fresh reports from Medical Officers of Health	1
No. of herds involved	1
No. of cases of tuberculosis of the udder found	—
No. of cases outstanding at end of quarters	1

TUBERCULOSIS (ATTESTED HERDS) SCHEMES.

No. of Attested Herds	71
No. of Supervised Herds	2

2. MEAT AND OTHER FOODS.

No action was taken under the Public Health (Condensed Milk) Regulations, 1923-1927, the Public Health (Preservatives in Food) Regulations, 1925-1927 or the Public Health (Dried Milk) Regulations.

3. ADULTERATION, etc.

FOOD AND DRUGS ACT, 1938.

The County Public Analyst (Dr. E. Voelcker) has reported as follows :

During the year ended December 31st, 1941, 565 samples have been submitted under the above Act, and of this number 81, or 14.3 per cent. were not satisfactory.

The list of samples taken is as follows :

		Brought forward	508
Milk ..	449	Tea savers	3
Skimmed milk	1	Onion extract	1
Separated milk	1	Onion powder substitute ...	2
Butter	19	Sugar substitute	11
Margarine	7	Sweetening liquid	1
Lard	8	Fish browner	1
Sausages	7	Cooking fat	2
Malt vinegar	1	Orange substitute	4
Jam	4	Lemon substitute	9
Marmalade.....	1	Egg substitute	8
Sweetened S.R. Flour	1	Egg mixture	1
Drinking chocolate	2	Real dried egg	3
Lemon squash	1	Pancake mixture	1
Lime Barley water	1	Butter flavouring	1
Coffee and Chicory extract	1	Milk powder substitute	3
Parsley, Thyme and Lemon stuffing	1	Eggstead.....	1
Meat paste	1	Kurd cheese	1
Fish paste	1	Finest grape juice	1
Rum and Coffee extract with chicory	1	Savoury roll	1
		Dessert powder	1
		Choc. blancmange powder ...	1
	508		565

MILKS. During the year, 449 samples of milk have been submitted of which 18 were taken as "appeal to cow" samples. Of the 431 samples taken in ordinary course no less than 55 or 12.7 per cent., were either adulterated or of poor quality. This high percentage of unsatisfactory samples is no doubt due to the general shortage of milk throughout the Country, but all the same such a percentage of adulteration is a matter of very grave concern. I have always considered the adding of water to milk, as well as the giving of short weight in coal, to be one of the meanest forms of crime as it nearly always affects those who can ill afford the cumbersome procedure of getting proper redress. It is easy enough for the Analyst to say that a milk contains so much added water, but it is a dangerous and unenviable business for the average householder to accuse anyone of tampering with the milk supply. I would like to see that in future the purveyor of milk, whoever he may be, who wilfully adulterates milk, be punished in an adequate manner, and that proper publicity of his crime be made in his dairy or farm, as a warning to others.

Adulterated milks or those below standard submitted during the year are as follows :

<i>Quarter</i>	<i>Added Water</i>	<i>Deficiency in Fat</i>	<i>Deficiency in Fat or S.N.F. but not due to Added Water</i>	<i>Total number of Adulterated Milks</i>
March	14	4	5	23
June	1	9	3	13
September	1	11	2	14
December	2	3	—	5
<i>Total</i>	18	27	10	55

War Time Substitutes. The sale of substitutes in order to replace articles no longer available and which have been regarded as some of the necessities of life, should be subjected to the closest scrutiny. Little objection can be taken to the sale of such articles which are harmless and yet useful, but advantage has been taken of the credulity of the public to market goods under descriptions and labels which are wholly false and misleading to the purchaser.

Whenever a foodstuff becomes unavailable, a substitute for the natural article appears all too soon. In the present war it was not long before there appeared on the market a substitute for practically every article of unobtainable food—such as meat, milk, egg, sugar, onion and fruit juices—some were good, but the majority of very doubtful value, put forward, not to meet a general public need, but purely as a means of making a large profit in as quick a time as possible.

Unfortunately for some of the manufacturers, and to the good fortune of the public, the timely intervention of the Minister of Food has saved the position from becoming completely out of hand. To show how serious the matter had become, in Northamptonshire alone from August to the end of December, no less than £205/11/0 was taken in fines and costs for these spurious substitutes.

Substitutes may now only be manufactured under a licence, the terms of which are so strict that many "substitutes" are now off the market altogether.

An Order in Council, dated 11th October, 1941 (S.R.&O. 1941, 1606). The Substitutes (Control) Order, provides that no person may manufacture after that date, a food substitute without being licensed to do so by the Ministry of Food, and after the 10th November, 1941, no person may sell or offer or expose for sale a food substitute not manufactured under and in accordance with the terms of such a licence. A licence granted under this Order does not relieve the holder from complying with the provisions of the Food and Drugs Act, or any other Statute. Licences granted so far have been very drastic in their requirements and conditions and no doubt the full effect of the Order will soon be apparent. In the meantime there are still large quantities of unlicensed substitutes on the market which the manufacturers have made no effort to recall.

The Minister has, in my opinion, done a very great service both to the manufacturer in general and to the public, by the taking of the prompt step that he did in putting a stop to the flooding of the market with these worthless substitutes. On the other hand it must be clearly understood that the granting of a licence is not to be taken as an implied blessing of the Minister, and one to be regarded as a kind of testimonial. It is nothing of the sort and it merely means that certain conditions laid down by the Minister have to be complied with in order to qualify for a licence to manufacture at all.

Some of these so-called substitutes were nothing more than bare-faced swindles, put on the market by unscrupulous people devoid of any moral sense of decency and public duty in such a time as we are now passing through. Amongst the worst are the "fruit juice" substitutes that claim to be equal to the juice of anything up to 20 oranges or lemons. These are nothing more than cheap flavourings and in no way take the place of a fractional part of the raw fruit. Mothers feeding their children on these concoctions, under the impression they are giving them the equivalent of fresh fruit, run a grave risk of doing harm, especially when the acid content is often a mineral acid, phosphoric, instead of the natural organic acid, citric, of the citrous fruits.

Egg substitutes bear no relation to the egg and consist generally of a mixture of wheat flour, soya meal, bicarbonate of soda, gum tragacanth and a yellow food colour. Wheat flour brought over to this Country at the risk of men's lives should not be allowed to be made the basis of speculation. Wheat flour costs roughly about £12 a ton but by the time it had been turned into an "egg" substitute (and these are nothing more than a coloured self-raising flour) it is offered to the public at sixpence an ounce or £896 a ton !

Milk substitutes consist generally of wheat flour, rice flour, common salt and either gelatin or dextrinised potato starch. It is true that the sale of these substitutes were never intended to reach the retail market and were supposed only to be used by the bakery trade, still they did get to the housewife. I can well imagine that anyone using these mixtures as milk for consumption as such would, without doubt, be overcome by a violent feeling of nausea. The price asked was about 3/- a pound.

Meat substitutes consist of wheat flour, soya meal and a very small amount of a meat extract, whilst the onion substitutes consist generally of wheat flour impregnated with some essence of garlic. I have heard that asafoetida is sometimes used, although I myself have not actually found positive proof of its presence.

Sugar substitutes nearly always are solutions or powders containing either saccharin or dulcin. The former more than the latter. Wild and fantastic claims are made as regards the relative sweetening power of the solutions. In one instance in the County the content of a bottle was claimed to be equal to 100 lumps of sugar—it was not equal to 10 lumps.

The manufacturers of these substitutes have had a good run for their money, but I feel that the market is now virtually killed, mainly by the concerted action of public analysts, aided by a certain amount of publicity of the Press.

Of the remaining samples, other than milk and substitutes, there is little about which to make much comment. One sample of butter out of 19 consisted entirely of margarine, whilst one sample of sausage contained an excess of meat. The maximum amount of meat allowed is 45 per cent. whereas the sample contained 50 per cent.

A sample described as Finest Grape Juice contained a very large excess of sulphur dioxide preservative. There was present some 1,597 parts per million instead of the maximum amount of 350 parts per million allowed.

A sample of Tea Savers, claimed to save one's tea ration, was found to be nothing more than bicarbonate of soda in tablet form. No further amount of extractive matter is rendered soluble by the use of these "savers," in fact, the bicarbonate of soda only makes an infusion darker in colour and in this way an optical illusion is created giving the impression that more cups of "tea" are capable of being poured from the pot.

(Signed) ERIC VOELCKER.
Public Analyst for Northamptonshire.

The following extracts are taken from the report of the Chief Inspector of Food and Drugs (Mr. A. E. Waller) :

Proceedings were instituted during the year with the following results :

MILK.

	<i>Fine</i>			<i>Costs</i>		
	£	s.	d.	£	s.	d.
7.5 per cent. added water		19	0	1	1	0
26.7 per cent. added water	10	0	0	3	6	6
35.8 per cent. added water	20	0	0			
34.2 per cent. added water	10	0	0			
7.5 per cent. added water	15	0	0	11	9	9
10.3 per cent. added water	15	0	0			
3.7 per cent. added water	15	0	0			
7.5 per cent. added water	15	0	0			
14.3 per cent. added water	15	0	0			
4.6 per cent. added water	15	0	0			
6.5 per cent. added water	15	0	0			
13.2 per cent. added water	4	9	6	10	6	
21.7 per cent. added water	5	0	0	1	1	0
28.3 per cent. added water	5	0	0	1	11	6
38.3 per cent. deficient in fat	10	0	0	10	6	
16.0 per cent. deficient in fat	Dismissed.					
36.3 per cent. deficient in fat	Dismissed.					
37.3 per cent. deficient in fat	1	9	6	10	6	
26.6 per cent. deficient in fat	1	0	0			
43.3 per cent. deficient in fat	10	0	0			
23.0 per cent. deficient in fat	1	0	0	10	6	

FOOD SUBSTITUTES.

Lemon substitute	false label	20	0	0			
Lemon substitute	misleading label.....	20	0	0	10	7	6
Whole egg equivalent	false label	20	0	0	3	13	6
Tea savers	misleading label.....	5	0	0	10	6	
Lemon substitute	false label	5	0	0	6	5	6
Sugar substitute	false label	10	0	0	10	6	
Sugar substitute	false label	10	0	0			
Sugar substitute	misleading label.....	10	0	0	10	10	0
Sugar substitute	misleading label.....	5	0	0	18	0	
Milk substitute powder	misleading label.....	10	0	0	11	11	6
Milk substitute powder	misleading label.....	10	0	0	15	1	6
Milk substitute powder	misleading label.....	10	0	0	5	0	0
Egg substitute	misleading label.....	2	0	0	3	16	6
Egg substitute	misleading label.....	2	0	0	3	16	6
Total		£204	3	0	£92	13	3

A comparative table is given showing the number of samples taken, the number reported against and the results of prosecutions for the last 4 years.

<i>Year.</i>	<i>Samples submitted for analysis.</i>	<i>Samples reported against. Number.</i>	<i>Percentage.</i>	<i>Amount of fines and costs in prosecutions.</i>
1938	579	75	12.9	£13 13 6
1939	573	62	10.8	£24 3 0
1940	561	65	11.6	£107 9 6
1941	565	81	14.3	£296 16 3

The work during the year has been exceptional and it is hoped that the action will result in future reports not containing so many evidences of the greed of certain people who are willing to exploit the general food position at the expense of the public.

MILK IN SCHOOLS.

The results of the testing of 104 samples of milk supplied to schools within the County were very satisfactory. Following up formal samples were needed to be taken in six doubtful cases, in all of which the milk was found to be genuine. The average fat content of the school milk samples was 3.74 per cent., compared with 3.70 per cent. for the milk samples taken in the ordinary course of sampling.

TUBERCULOUS MILK—VETERINARY INVESTIGATION.

Only one case was reported. It related to a sample of milk taken in the City of Birmingham from a supply produced at Upper Boddington, and which, on examination, had been found to be tubercle-infected.

A veterinary inspection was made at the farm and two individual samples of milk and two group samples involving nine cows were taken for biological examination; the samples were all certified non-tuberculous.

Two further individual samples were later taken from cows which were dry at the time of the first clinical examination, but which may possibly have been in milk when the Birmingham sample was taken; these samples were also certified non-tuberculous.

SECTION F.

Prevalence of, and Control over, Infectious and other Diseases.

1. ISOLATION HOSPITAL ACCOMMODATION.

Under the Scheme for the provision of adequate hospital accommodation, the County is divided into three areas, *viz.*, Western, Kettering and Eastern, and hospitals are situated at Staverton, Kettering and Wellingborough respectively. The hospitals are in each instance, administered by Joint Hospital Boards.

2. INFECTIOUS DISEASES AND VACCINATION.

Smallpox. No case was notified.

Vaccination. The statistics of vaccination for 1940 (the latest year available) show an increase in the number of successful vaccinations in the Administrative County, the percentage of successful vaccinations to registered births being 12.9 as compared with 11.7 for the year 1939. The highest percentages of vaccinations were in the Guardians Areas of Brixworth (17.0) and Kettering (15.1) and the lowest in the Guardians Area of Wellingborough (6.3).

Scarlet Fever. 425 cases were notified as against 341 for the year 1940. No District escaped. In the Urban Districts, Kettering, Rushden, and Corby had the highest numbers, and in the Rural Districts the cases were fairly evenly distributed. There was one death.

Diphtheria. 123 cases were notified as against 180 for the year 1940. The highest numbers were in the Northampton Rural District, Kettering Borough, Daventry and Towcester Rural Districts. Eight Districts escaped visitation. There were 11 deaths as against 13 in the year 1940.

Enteric Fever (including Paratyphoid (48 cases)). 53 cases were notified as against 210 cases in the year 1940. 29 cases were in Brackley Rural District and 12 in Kettering Borough. In all, nine Districts were affected. There were no deaths, against two in the year 1940.

Erysipelas. 73 cases were notified, against 101 in the year 1940.

Chicken Pox. Two cases were notified.

Measles. 4,276 cases were notified, against 6,273 in the year 1940. No District escaped visitation. There were 7 deaths—the same number as in the year 1940.

Whooping Cough. 1,464 cases were notified against 487 in the year 1940. Oundle Urban was the only District entirely free. There were 13 deaths against 7 in the year 1940.

Diarrhoea (under two years of age). There were 4 deaths against 7 in the year 1940.

Puerperal Pyrexia : Ophthalmia Neonatorum. These diseases are dealt with under "Maternity and Child Welfare" in Section B. of this report.

Influenza. 44 deaths occurred against 51 in the year 1940.

Pneumonia (Acute Primary and Acute Influenzal). 327 cases were notified against 265 in the year 1940. Corby, Desborough and Rothwell were the only Districts without notifications. The deaths from *all forms* of Pneumonia amounted to 154 against 164 in the year 1940.

Acute Poliomyelitis : Polio-Encephalitis. 4 cases were notified—the same number as in the year 1940. No death occurred.

Cerebro-Spinal Fever. 28 cases were notified—the same number as in the previous year. There were 8 deaths against 14 in the year 1940.

Encephalitis Lethargica. 2 cases were notified. 6 deaths occurred from acute infantile encephalitis.

Malaria. No case was notified.

Dysentery. 77 cases were notified, two Rural Districts contributed all but one of this total.

School Closures. 4 schools were closed for varying periods owing to cases of measles, whooping cough (2 schools) and one case of Poliomyelitis.

Home Nursing of Infectious Cases. In addition to cases of Puerperal Pyrexia, Ophthalmia Neonatorum, Tuberculosis, and Government Evacuation Scheme cases; the following cases were nursed in their homes : Influenza 243, Pneumonia 93, Measles 62, Whooping Cough 38, Infantile Diarrhoea 32, Chicken Pox 14, Erysipelas 1. Nursing care was also given to several other cases not provided for in the arrangements with the Northamptonshire Nursing Association.

3. CANCER.

The facilities for treatment in the County were fully described in the Annual Report for the year 1936.

The total deaths in the Administrative County from Cancer amounted to 454 (194 males and 260 females) as compared with 433 in the year 1940. The Urban Districts had 223 deaths and the Rural Districts 231 deaths.

The death-rate for the County during 1941 was 1.74 per 1,000 of the population as against 1.79 for the year 1940, and as against 1.77 for England and Wales for the year 1941.

4. DIPHTHERIA IMMUNISATION.

The campaign, which received great publicity from the Ministry of Health, to immunise the child population between the ages of 1-15 years against Diphtheria, was commenced in January. At the invitation of the County Medical Officer of Health a meeting of all Medical Officers of Health in the County was held, at which it was agreed that the campaign should be carried out by the County Public Health Department on behalf of the District Councils, as the facilities of the County Council, namely, the schools, infant welfare and school clinics were the main centres which could ensure the success of the effort.

The response of the public was good, as may be seen from the figures for the whole county, given below. But to obtain the desired effect—the elimination of the deadly disease Diphtheria, at least 80-85% of the 1-5 age group, and 70-75% of the 5-15 age group must be immunised. The main part of the future campaign is to protect each child as soon after the first birthday as possible.

The work was carried out by all members of the Public Health Department in an intensive drive during the first six months of the year so that as large a number as possible of the 1-15 age group should be immunised in the shortest period. No effort was spared to ensure the success of the campaign.

The public have been, and continue to be, receptive to the propaganda of the Ministry of Health *via* the B.B.C. and National Press, but, in addition, what success has up to the present repaid the effort in this County, has in large part, been due to the active co-operation of the Education Committee and all the Headteachers, the members of the Health Visitors and Medical Staff of the Public Health Department. The continuation of the effort, and co-operation of the members of the staffs concerned, will ensure the success of this extremely practical branch of Preventive Medicine.

	<i>Under Five Years</i>	<i>Five-Fifteen Years</i>
Number of children who completed the full course of immunisation during the year	5,558	21,216
Estimated percentage	40%	67%

5. TUBERCULOSIS.

The following figures *compiled from the Returns of the District Medical Officers of Health* show the position of the County as regards existing cases of Tuberculosis at the end of the year 1941.

<i>Pulmonary.</i>			<i>Non-Pulmonary.</i>			<i>Total.</i>
<i>Males.</i>	<i>Females.</i>	<i>Total.</i>	<i>Males.</i>	<i>Females.</i>	<i>Total.</i>	<i>Cases.</i>
584	503	1,087	222	191	413	1,500

Particulars of new cases of Tuberculosis (inclusive of five non-civilian cases) and of all deaths from the disease in the area during 1941 are shown below :

AGE PERIODS.				NEW CASES.				DEATHS.			
				PULMONARY.		NON-PULMONARY.		PULMONARY.		NON-PULMONARY.	
				M.	F.	M.	F.	M.	F.	M.	F.
0	...	...	...	—	—	2	—	—	—	—	—
1	...	...	...	1	—	5	2	—	1	4	3
5	...	...	...	7	3	10	6	1	1	2	1
10	...	...	...	3	7	5	6				
15	...	...	...	14	14	3	5				
20	...	...	...	18	21	3	2	30	39	6	2
25	...	...	...	34	35	4	4				
35	...	...	...	21	17	2	2				
45	...	...	...	14	9	3	1	17	11	3	1
55	...	...	...	19	9	1	1				
65 and upwards	...	...	...	3	4	—	—	2	4	1	1
TOTALS	...	...	...	134	119	38	29	50	56	16	8

Forty-seven new cases were not notified in this Administrative County, and there were three posthumous notifications ; the new cases were transfers from other areas.

The total primary notifications of Tuberculosis among civilians during the year 1941 amounted to 265—155 in the Urban Districts and 110 in the Rural Districts. Of this number, 208 were suffering from respiratory forms of the disease and 57 from other forms of Tuberculosis. There were 71 more primary notifications during 1941 than for the year 1940. Table III in the Statistical Section shows the number of cases notified in each District.

There was no evidence of excessive incidence of tuberculosis in any particular occupation in the County. Persons engaged in the Boot and Shoe Industry, however, accounted for 15 per cent. of the notifications, which would probably not appear excessive since the industry is the principal one in the County.

MORTALITY. Respiratory—During the year 1941, 106 deaths (50 males and 56 females) occurred, 74 of which were in the Urban Districts and 32 in the Rural Districts.

Other Forms—24 deaths occurred from other forms of the disease (16 males and 8 females) 18 in the Urban Districts and 6 in the Rural Districts.

There were thus 130 deaths from all forms of tuberculosis as compared with 141 deaths in 1940. The mortality rate was 0.50 per 1,000 of the population as against 0.58 in the previous year. The rate for the Combined Urban Districts was 0.68 and for the Combined Rural Districts, 0.30.

In view of the special attention devoted to the behaviour of tuberculosis in war-time, the deaths and death rates in the county, since the beginning of the century, have been extracted and are contained in the table on page 31). The rise in the incidence and mortality from tuberculosis which occurred between 1915 and 1918 will be noted. It will also be observed that, since the beginning of the century the death rate has been more than halved.

NORTHAMPTONSHIRE.

TUBERCULOSIS DEATHS AND MORTALITY RATES, 1900-1941.

Year	Estimated Populations.	Tuberculosis of Respira- tory System.	Death Rate per 1000 of Population.	Other forms of Tuberculosis	Death Rate per 1000 of Population.	All forms of Tuberculosis	Death Rate per 1000 of Population.
1900	220,678	205	.93	46	.20	251	1.13
1901	207,719	162	.78	47	.22	209	1.00
1902	209,984	199	.94	63	.30	262	1.24
1903	212,610	182	.85	66	.31	248	1.16
1904	213,874	204	.95	82	.38	286	1.33
1905	214,909	165	.77	85	.39	250	1.16
1906	216,319	186	.86	63	.29	249	1.15
1907	216,935	196	.90	61	.28	257	1.18
1908	217,765	207	.95	68	.31	275	1.26
1909	219,149	185	.84	77	.35	262	1.19
1910	220,897	190	.86	66	.29	256	1.15
1911	213,796	204	.95	77	.36	281	1.31
1912	215,091	197	.92	57	.26	254	1.18
1913	215,579	192	.89	58	.26	250	1.15
1914	216,569	178	.82	50	.23	228	1.05
1915	211,286	202	.95	59	.28	261	1.23
1916	202,552	242	1.19	60	.30	302	1.49
1917	190,215	229	1.20	55	.29	284	1.49
1918	192,564	230	1.19	59	.31	289	1.50
1919	207,508	183	.88	52	.25	235	1.13
1920	215,777	160	.74	44	.20	204	0.94
1921	212,270	172	.81	46	.21	218	1.02
1922	213,340	162	.76	27	.12	189	0.88
1923	214,331	159	.74	38	.17	197	0.91
1924	215,200	169	.78	27	.13	196	0.91
1925	215,300	174	.80	35	.17	209	0.97
1926	214,200	136	.63	28	.13	164	0.76
1927	215,000	162	.75	30	.14	192	0.89
1928	215,100	140	.65	32	.14	172	0.79
1929	216,500	159	.73	20	.09	179	0.82
1930	217,550	150	.69	31	.14	181	0.83
1931	218,300	130	.60	25	.11	155	0.71
1932	213,900	115	.53	24	.11	139	0.64
1933	214,300	116	.54	20	.09	136	0.63
1934	214,550	114	.53	34	.15	148	0.68
1935	216,200	119	.55	27	.12	146	0.67
1936	217,600	99	.45	18	.08	117	0.53
1937	220,400	94	.42	28	.13	122	0.55
1938	221,400	104	.47	24	.10	128	0.57
1939	228,300	96	.42	16	.07	112	0.49
1940	241,200	113	.47	28	.11	141	0.58
1941	259,820	106	.41	24	.09	130	0.50

TREATMENT OF TUBERCULOSIS.

Return relating to the work of the Dispensaries during the year ending 31st December, 1941.

DIAGNOSIS.	Pulmonary				Non-Pulmonary				Total				Grand Total
	Adults		Children		Adults		Children		Adults		Children		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
A. (1) Number of definite cases of Tuberculosis on the Dispensary Register at the beginning of the year	356	271	23	17	44	52	60	54	400	323	83	71	877
(2) Transfers from other Authorities during the year	15	20	3	2	1	2	1	1	16	22	4	3	45
(3) Lost sight of cases returned during the year	—	—	—	—	—	—	—	—	—	—	—	—	—
B. Number of New Cases diagnosed as tuberculous during the year ...													
(1) Class T.B. minus	52	46	5	7	—	—	—	—	114	94	15	17	240
(2) Class T.B. plus	51	42	—	—	—	—	—	—					
(3) Non-pulmonary	—	—	—	—	11	6	10	10					
C. Number of cases included in A. and B. written off the Dis- pensary Register during the year :													
(1) Recovered	6	8	2	—	7	9	8	9	13	17	10	9	212
(2) Dead (all causes)	49	45	—	1	3	2	—	1	52	47	—	2	
(3) Removed to other Areas ...	24	25	1	3	—	3	—	—	24	28	1	3	
(4) For other reasons	2	2	—	—	—	—	2	—	2	2	2	—	
D. Number of definite cases of Tuberculosis on the Dispensary Register at the end of the year ...	393	299	28	22	46	46	61	55	439	345	89	77	950

Dispensary Work. The situation, days and hours of opening of the 4 County Tuberculosis Dispensaries are as stated in the report for last year.

The number of attendances at Dispensaries was 5,280. This number includes 2,697 attendances made by 191 patients who came for treatment by Ultra Violet Radiation. 1,218 new patients, exclusive of contacts, were examined in connection with the dispensaries for the first time in 1941. Of these 235 were diagnosed as suffering from tuberculosis before the end of the year; 10 were considered to be doubtfully tuberculous and remained under observation, and 973 were considered to be non-tuberculous.

164 contacts were examined in addition to the 1,218 new patients. Of these, 5 were regarded as suffering from tuberculosis and 159 were considered to be non-tuberculous.

The number of visits made by the Tuberculosis Officer to patients in their own homes was 365 (inclusive of 113 personal consultations with medical practitioners). The total number of consultations, personal and otherwise, between Tuberculosis Officer and medical practitioners was 858. Of the 240 new patients (inclusive of the five contacts found to be tuberculous) who were diagnosed as suffering from tuberculosis, 90 per cent. were notified after they had been examined by the Tuberculosis Officer, and only 10 per cent. previous to examination by the Tuberculosis Officer. All these patients, with the exception of the five who were examined as contacts, were seen by the Tuberculosis Officer at the request of their own medical attendant.

The total number of visits paid by the Health Visitors to the homes of tuberculous patients was 3,056.

Of the 1,382 persons, including contacts, who were examined for the first time in 1941, 203 were found to be suffering from pulmonary tuberculosis, and 37 from non-pulmonary tuberculosis. The former were placed in the following categories :

Sputum Negative for Tubercle Bacilli	109 or 53.70 per cent.
Sputum positive for Tubercle Bacilli, Group 1	1 or .49 per cent.
Sputum positive for Tubercle Bacilli, Group 2	57 or 28.08 per cent.
Sputum positive for Tubercle Bacilli, Group 3	36 or 17.73 per cent.

The 37 non-pulmonary cases were classified as follows :

Bones and Joints	15 or 40.54 per cent.
Abdominal	4 or 10.81 per cent.
Other Organs	4 or 10.81 per cent.
Peripheral Glands.....	14 or 37.84 per cent.

During the year 16 pulmonary and 33 non-pulmonary cases were transferred from the arrested to the cured class and written off the Register as " Recovered."

X-rays. X-ray work continued during the year at the Kettering, Wellingborough, Northampton and Rushden House Sanatorium Health Clinics.

2,321 examinations were made by X-ray screen and film, which was 565 more than the previous year. These facilities added greatly to the accuracy and speed of diagnosis.

A portable X-ray set was purchased for use at the Northampton Clinic, on account of the growth of the work at this Dispensary and the number of pneumothorax refills. The apparatus has been useful within its limits, and has been transferred to the Sanatorium on occasion for X-ray of bed patients, and to other Clinics in the event of temporary failure of apparatus.

Pathological Specimens. The following pathological specimens were examined by the Tuberculosis Officer :

Sputum : Negative	446
Positive	91
	<hr/>
	537
	<hr/>

Shelters. The number of open-air shelters occupied by tuberculous patients was 19.

Treatment. In addition to routine Sanatorium and Domiciliary treatment, Tuberculin, in the form of Koch's Tubercle Bacilli Emulsion, was supplied to three patients with renal tuberculosis. As regards special treatment, 346 pneumothorax refills were given at the dispensaries, and an account of Ultra Violet Radiation by Alpine Sun Lamp and Kromayer Lamp follows.

TREATMENT OF TUBERCULOSIS BY ARTIFICIAL LIGHT.

The conditions for which treatment was given are classified as follows :

	<i>Old Patients</i>	<i>New Patients</i>	<i>Evacuees</i>	<i>Total</i>
Psoriasis }				
Impetigo }	4	7	—	11
Eczema }				
Cervical Adenitis	34	18	—	52
Delicate children	49	60	5	114
Bronchitis and Bronchiectasis	8	—	—	8
Lupus	5	1	—	6
Bones and Joints	—	—	—	—
Totals	100	86	5	191

Patients had treatment by general Ultra Violet Radiation and some by local radiation in addition. 191 patients attended and made 2,697 attendances during the year. Similar results to those noted in previous reports were achieved.

Examination of Recruits for Ministry of Labour. Of 222 recruits examined at the Dispensaries, five men were diagnosed as suffering from active pulmonary tuberculosis, and four of these were found to have tubercle bacilli in their sputum.

SANATORIUM REPORT.

During the year 75 beds have been available for patients with pulmonary tuberculosis, 41 for males, and 34 for females. Seven patients were admitted for clinical investigation and were all discharged finally as non-tuberculous.

There were 133 admissions of patients, 71 male, and 62 female ; and 116 were discharged, 61 male, and 55 female. Deaths in the Sanatorium numbered 15. The retention of advanced patients is consistent with the policy of isolation. This has been a useful method of preventive treatment. 20 patients suffering from pleurisy with effusion were treated during the year—all with satisfactory results. 73 sputum positive cases were under treatment, stage (1) none, stage (2) 46, and stage (3) 27, and 36 P.T. negative cases during the year. Treatment was sufficient in 37 patients to bring the disease to quiescence. The average length of stay was 199.9 days.

Laboratory Work. 208 sputum tests were made, 131 positive, and 77 negative. Of patients with positive sputum on admission, 15 were negative on discharge. The Blood Sedimentation Rate was assessed on admission of each patient, and at monthly intervals during treatment. This examination gives an immediate indication as to the patient's condition, and activity of disease. 801 such examinations were made during the year.

X-ray Work. All patients are filmed on admission, and subsequently during treatment. 2,293 X-ray examinations were made, consisting of 2,051 screen examinations, and 242 films. All nursing and domestic staff are X-rayed on commencing duties, and at periods during their service according to their reaction to the Mantoux test.

Treatment. Consists of absolute rest for patients with the most active type of disease, substituted for those who have lost their toxæmia by hours up, and later by light graded work. Additional measures were used with some patients :

- (1) *Gold Treatment.* 13 patients were treated, and 119 injections given, the average total amount of gold being 1.37 gms.
- (2) *Cadmium.* 544 injections of Cadmium Sulphide in sterile olive oil were given to 45 patients.
- (3) *Artificial Pneumothorax Treatment.* Treatment by artificial pneumothorax was continued throughout the year. 32 inductions of artificial pneumothorax were made at the Sanatorium, and 4 were abandoned within one month. 757 refills were given. 37 extra pleural refills were given to one patient, and there were 16 pleural wash-outs.
- (4) *Adhesion Section.* 2 patients were transferred to Creaton Sanatorium for section of adhesions limiting artificial pneumothorax treatment.
- (5) One patient was transferred to Creaton Sanatorium for thoracoplasty.

The Treatment Block at the Sanatorium was again in use throughout the year for examination of patients, artificial pneumothorax treatment, pleural wash-outs, sedimentation rates, dental work, and X-ray work, and also as an office.

Dental Department. The work provided by the Visiting Surgeon was as follows : No. of Inspections 101, No. of Extractions 134, No. of Fillings 45 and No. of Scalings 3.

AFTER CARE.

Public Health Care Work. During the year the sum of £846 was spent for the purposes of relief and after care of patients. The distribution of this amount rests with the Public Health Committee. Several families received substantial grants, and in this way were prevented from applying for Public Assistance. Extra nourishment of milk, butter, and eggs, was granted to 80 patients as against 86 in the previous year : 12 patients received sums varying from 5/- to 36/- weekly, in the form of food stuffs. It was found that rationing curtailed the amount of food stuffs which could be granted to one patient, but this difficulty was fairly well countered by supplying the rationed foods for the whole of the family, thus allowing the family to spend their funds on non-rationed goods.

Care Work by Public Assistance Committee. As in previous years, close contact has been maintained with the Public Assistance Department and, from time to time, increases in grant have been made because of the presence of tuberculosis.

Voluntary Care Committees. Since last year there has been no change in the number of Care Committees which exist in the County. There has been much activity in voluntary care work in the county, and close co-operation between various committees. Correspondence has been held with the National Association for the Prevention of Tuberculosis on the seal sales, the question of supply of fats and eggs to tuberculosis patients, on film shows, and on miniature radiography.

The method of raising funds for the committees with seals was widely used in the county, and a general advertising scheme was arranged. The results of the Seal Sales were satisfactory. Burton Latimer amount was £28/12/11, Desborough £52/12/10, Higham Ferrers £29/16/11, Irthlingborough £16/13/4, Kettering £73/0/1, Rothwell £40/12/1, Rushden £177/2/1, Wellingborough £92/7/10. Thus the total seal sale amounted to £510/18/1. Voluntary Care Committees generally appreciated the necessity for increased efforts in their campaign in war-time.

6. VENEREAL DISEASES.

TREATMENT. The arrangements made with the Northampton General Hospital for the diagnosis and treatment of patients suffering from Venereal Diseases were continued during the year, the parties to the arrangements being as hitherto, *viz.*, the County Councils of Northampton and Buckingham and the Northampton County Borough Council.

The days and hours of openings of the Out-Patient Clinic at the Northampton General Hospital are :

Sundays (fortnightly) at 11.30 a.m., for Males.

Mondays at 12 noon for Females (since 8th June, 1942, at 7 p.m. instead of 12 noon).

Wednesdays at 2 p.m. for Males.

Fridays at 12 noon for Females, and 7 p.m. for males.

During the year 1941, 320 new County patients attended the out-patient clinic for treatment as compared with 175 in the year 1940. The total attendances of all County patients amounted to 3,162 as against 2,144, and the number of patients discharged after completing treatment was 140 as against 80. The number who ceased to attend without completing treatment, or before the final test as to cure was 40 as against 29.

The number of persons treated with salvarsan substitutes was 293 as against 240 for the year 1940.

The number of County in-patients treated at the Northampton General Hospital was 10 (males 2, females 8), as against 17 in the previous year.

It was found necessary to repay the travelling expenses of eighteen persons from the County, who attended the Clinics either at the Northampton General Hospital or at Peterborough.

The following table supplies information about new County cases and attendances, etc., during the three years, 1939-1941 :

	1939		1940		1941	
	MALES	FEMALES	MALES	FEMALES	MALES	FEMALES
1. Number dealt with at or in connection with the Out-patient Clinic for the first time	91	55	105	70	204	116
2. Total attendances of all persons at the Out-patient Clinic	1759	484	1515	629	1894	1268
3. Number discharged after completion of treatment	62	36	52	28	65	75
4. Number who ceased to attend without completing treatment	19	2	23	6	20	20
5. Number of persons treated with salvarsan substitutes	73	37	167	73	182	111

NATURE OF TEST.	NUMBER OF TESTS IN RESPECT OF PATIENTS UNDER CARE OF :		
	TREATMENT CENTRES	HOSPITAL AND OTHER INSTITUTIONS	PRIVATE PRACTITIONERS
MICROSCOPICAL—			
For detection of spirochetes	10	2	—
For detection of gonococci	606	123	27
SERUM TESTS—			
For Wassermann reaction	322	549	143
Kahn Tests	11	2	—
For gonococcal infection	36	11	—
CEREBRO-SPINAL FLUID TESTS—			
Wassermann reaction	—	30	—
Colloidal	—	3	—
CULTURES—			
For Gonococci	46	—	—
	1031	720	170

There were 11 Medical Practitioners in the County, inclusive of the two Medical Officers of the Treatment Centre, scheduled as being qualified to receive free supplies of salvarsan substitutes during the year, and supplies were sent, on request, to four of these in respect of six patients.

In addition to the in-patients at the Northampton General Hospital previously mentioned, four unmarried girls received treatment in Cleveland House, Wolverhampton, and one unmarried girl treatment at St. Mary's Home, Leicester, as County Council patients. They were admitted for treatment of pregnancy and venereal disease.

With respect to those who ceased to attend before the completion of treatment the following information is given :

	<i>Syphilis.</i>		<i>Gonorrhoea.</i>	
	Male.	Female.	Male.	Female.
Number of patients on books 1/1/41	53	36	21	14
New cases during 1941	10	38	42	17
	<hr/> 63	<hr/> 74	<hr/> 63	<hr/> 31
	<hr/> <hr/>	<hr/> <hr/>	<hr/> <hr/>	<hr/> <hr/>
Number of cases defaulting	8	13	12	7
Percentage of defaulters for 1941	12.7	17.5	19.0	22.5

Every effort is made by the staff of the Venereal Diseases Clinic to secure the re-attendance of patients who have ceased to attend before completing treatment.

CONGENITAL SYPHILIS. The number of cases dealt with for the first time was 7—2 males and 5 females.

PATHOLOGICAL EXAMINATIONS.

By the end of the year, 1,921 pathological examinations had been made at the Laboratory of the Hospital, as against 1,208 in the year 1940.

New Clinic.

A Venereal Diseases Clinic at the Kettering and District General Hospital was opened on the 6th November, 1941, and Sessions were held each Thursday following, for females at 4 p.m., and for males at 6 p.m. The number of cases treated to the end of the year was 31 (13 males and 18 females).

SECTION G.

Health Propaganda and Educational Work.

SOCIAL HYGIENE.

The Social Hygiene campaign was limited to an evening meeting for girls at Wellingborough. 125 girls—most of whom were quite young—attended. A frank talk was given about problems of conduct, bringing in the subject of venereal disease but not entering into details, as a film “A Doctor Talks” covered the ground.

The speaker at the above meeting had previously given three lectures (unofficially) at the Wellingborough High School.

GENERAL HEALTH EDUCATION.

Sixteen lectures were given by the medical and dental staffs to Women's Institutes, Guilds, Care Committees, Delegates Meeting of National Boot and Shoe Operatives Union, Domestic Science Teachers, Women Public Health Officers Association, and School Parents Associations. There was an average attendance of forty.

The lectures were very varied and included subjects comprising wartime problems of general and dental health, diphtheria immunisation, tuberculosis, public health aspect of family allowances.

Other useful educational work was also carried out at Schools and Welfare Centres by medical officers, dentists and health visitors.

CAUSES OF DEATH.										Brackley M.B.		Burton Latimer U.D.		Davenport M.B.		Desboro' U.D.		Higham Ferrers M.B.		Irthing-borough U.D.		Kettering M.B.		Oundle U.D.		Raunds U.D.		Rothwell U.D.		Corby U.D.		Rushden U.D.		Welling-borough U.D.		Aggregate of U.D.s		
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
ALL CAUSES		21	13	25	14	35	32	29	29	20	22	31	30	218	218	16	12	32	30	31	37	41	39	102	83	170	196	771	755									
1 Typhoid and paratyphoid fevers
2 Cerebro-spinal fever
3 Scarlet Fever
4 Whooping Cough
5 Diphtheria
6 Tuberculosis of respiratory system ..		1	..	2	1	2	4	1	1	..	2	1	1	9	10	..	..	..	..	1	4	1	3	9	4	9	6	38	36	1	..	..	..	..	..	..	..
7 Other forms of Tuberculosis.....		1	1	3	1	1	..	3	1
8 Syphilitic Diseases
9 Influenza .....		..	..	..	..	2	2	1	..	..	..	..	..	2	1	..	..	..	..	2	1	1	..	2	..	2	3	14	7	..	..	..	..	..	..	..	..
10 Measles .....		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
11 Acute polio-mylitis & polio-encephalitis		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
12 Acute Infantile Encephalitis .....		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
13 Cancer of buc : cav : and oesoph : (M), uterus (F).		1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
14 Cancer of stomach and duodenum ..		..	..	1	1	1	2	1	..	..	..	1	1	3	7	..	1	1	1	..	..	..	..	2	1	2	7	12	17	..	..	..	..	..	..	..	..
15 Cancer of Breast .....		..	..	..	2	..	..	..	..	..	..	..	..	10	10	..	..	..	..	..	..	..	..	2	3	5	3	26	25	..	..	..	..	..	..	..	..
16 Cancer of all other sites		2	2	1	..	..	1	2	5	2	..	5	1	16	19	2	..	1	1	4	2	1	3	5	14	15	17	58	65	..	..	..	..	..	..	..
17 Diabetes .....		..	..	..	..	..	..	1	1	..	..	..	2	2	1	..	..	..	..	..	..	..	..	..	..	..	..	..	5	5	..	..	..	..	..	..	..
18 Intra-cranial vascular lesions		3	3	5	3	3	1	3	6	2	..	1	4	19	34	1	2	3	5	2	6	3	2	15	9	23	32	83	107	..	..	..	..	..	..	..
19 Heart Disease		2	2	3	3	11	12	3	5	7	7	10	10	45	52	2	3	4	4	6	10	7	2	34	19	30	49	164	178	..	..	..	..	..	..	..
20 Other diseases of the circulatory system		..	..	..	..	3	2	2	3	1	1	..	1	1	..	..	2	2	2	1	..	..	1	4	2	3	1	10	9	..	..	..	..	..	..	..	..
21 Bronchitis.....		..	1	2	..	3	2	1	1	1	1	..	1	18	9	3	2	..	2	2	2	..	1	4	10	6	8	49	36	..	..	..	..	..	..	..	..
22 Pneumonia		1	1	3	1	..	1	4	1	2	..	2	2	17	7	2	..	4	2	1	1	..	1	4	1	..	4	10	14	..	..	..	..	..	..	..
23 Other respiratory diseases		1	..	..	1	2	1	..	..	..	..	1	..	3	4	..	..	..	..	..	..	..	1	1	..	3	..	10	1	..	..	..	..	..	..	..	..
24 Ulcer of stomach or duodenum ..		..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..
25 Diarrhoea under 2 years		1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
26 Appendicitis .....		..	..	..	..	..	..	..	..	..	..	1	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
27 Other digestive diseases		2	..	1	..	..	1	..	..	..	..	..	..	8	7	1	..	..	..	..	..	..	2	3	3	4	5	21	19	..	..	..	..	..	..	..	..
28 Nephritis .....		..	..	..	..	3	2	4	2	1	4	1	..	9	5	..	..	1	1	1	2	3	1	..	1	6	5	28	23	..	..	..	..	..	..	..	..
29 Puerperal and post-abortion sepsis ..		..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
30 Other maternal causes .....		..	..	..	..	..	..	..	..	..	..	..	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
31 Premature Birth .....		..	..	..	..	..	..	2	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
32 Congenital Malformation, Birth inj : infant : dis :		..	1	..	..	..	1	..	1	..	..	..	1	2	5	1	..	..	..	2	..	3	5	3	1	2	5	13	20	..	..	..	..	..	..	..	..
33 Suicide .....		..	..	1	..	..	..	..	..	1	..	..	1	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
34 Road traffic accidents		2	..	..	..	2	..	..	..	..	..	..	..	4	..	1	..	..	..	1	2	1	..	1	2	1	2	8	4	..	..	..	..	..	..	..	..
35 Other violent causes .....		..	..	2	..	1	..	1	..	..	..	2	..	6	3	..	..	..	..	..	..	2	2	1	2	9	3	15	5	..	..	..	..	..	..	..	..
36 All other causes		5	3	3	2	2	2	1	2	1	2	..	3	27	21	3	3	1	8	3	3	4	2	11	3	21	13	82	67	..	..	..	..	..	..	..	..
Deaths of Infants under 1 year		2	1	2	..	..	2	3	..	1	..	1	5	14	15	1	..	1	1	3	..	11	11	6	5	6	10	52	50	..	..	..	..	..	..	..	..
		2	1	2	..	..	2	3	..	1	..	1	5	13	14	1	..	1	1	3	..	11	11	6	5	6	10	51	49	..	..	..	..	..	..	..	..
		..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..
Live Births— (a) Infant & Maternal Mortalities		21	26	38	22	25	34	32	29	19	27	30	39	289	282	21	9	36	22	26	33	167	154	109	91	213	191	1026	965	..	..	..	..	..	..	..	..
		20	26	38	22	25	33	32	29	18	26	30	38	269	266	21	8	35	22	26	32	162	152	103	89	205	190	984	933	..	..	..	..	..	..	..	..
		1	..	..	..	..	1	..	..	1	1	..	1	20	16	..	1	1	..	..	1	5	2	6	5	8	4	42	32	..	..	..	..	..	..	..	..
(b) Birth Rate		21	22	35	20	24	32	30	27	19	26	30	39	268	260	20	9	36	22	23	31	167	152	103	90	194	177	970	907	..	..	..	..	..	..	..	..
		20	22	35	20	24	31	30	27	18	25	30	38	248	244	20	8	35	22	23	30	162	150	97	85	186	173	928	875	..	..	..	..	..	..	..	..
		1	..	..	..	..	1	..	..	1	1	..	1	20	16	..	1	1	..	..	1	5	2	6	5	8	4	42	32	..	..	..	..	..	..	..	..
For calculation of		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Stillbirths— (a) Maternal Mortalities		..	..	1	1	1	..	2	1	1	1	1	1	14	11	2	1	2	4	..	..	5	6	7	2	4	8	40	36	..	..	..	..	..	..	..	..
		..	..	1	1	1	..	2	1	1	1	1	1	14	9	1	1	3	1	..	..	5	6	5	2	4	8	36	33	..	..	..	..	..	..	..	..
(b) Stillbirth Rate		..	..	..	..	..	..	2	..	1	1	1	1	..	2	2	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

CAUSES OF DEATH IN ADMINISTRATIVE AREAS.—RURAL DISTRICTS.

TABLE I. (b)

CAUSES OF DEATH.		Brackley R.D.		Brixworth R.D.		Daventry R.D.		Kettering R.D.		Northampton R.D.		Oundle and Thrapston R.D.		Towcester R.D.		Welling- borough R.D.		Aggregate of R.D.'s.	
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
ALL CAUSES		69	65	108	115	105	121	77	82	98	89	127	119	109	102	94	97	787	790
1 Typhoid and paratyphoid fevers ...		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
2 Cerebro-spinal fever		1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	2	...
3 Scarlet Fever .....		...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1
4 Whooping Cough		1	...	...	...	...	1	1	...	...	1	1	...	1	1	...	1	4	4
5 Diphtheria		1	...	...	...	2	...	...	...	...	1	...	...	1	1	...	1	4	3
6 Tuberculosis of respiratory system ...		...	2	1	2	1	2	3	1	2	3	1	5	1	2	3	3	12	20
7 Other forms of Tuberculosis.....		...	...	1	...	...	...	3	...	...	...	1	...	1	...	...	...	6	...
8 Syphilitic Diseases .....		...	...	...	...	1	...	...	...	1	...	1	...	1	...	1	...	5	...
9 Influenza .....		...	1	3	2	3	2	...	2	2	...	2	4	2	...	...	...	12	11
10 Measles .....		...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...	2	...
11 Acute polio-myelitis & polio-encephalitis ...		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
12 Acute Infantile Encephalitis .....		...	...	...	...	...	...	1	...	...	...	...	...	...	1	...	...	1	1
13 Cancer of buc : cav : and œsoph : (M), uterus (F).		2	...	4	1	...	3	1	4	1	2	3	4	2	3	...	1	13	18
14 Cancer of stomach and duodenum		3	1	2	3	2	1	6	2	5	4	3	1	5	4	3	3	29	19
15 Cancer of Breast .....		...	4	...	1	...	4	...	2	...	3	1	4	...	4	...	1	1	23
16 Cancer of all other sites		6	8	9	14	2	10	4	9	8	7	12	7	5	8	9	10	55	73
17 Diabetes		1	...	1	3	1	3	...	...	...	1	1	4	1	1	1	4	6	16
18 Intra-cranial vascular lesions		9	6	7	13	8	10	7	13	13	11	8	15	13	12	9	15	74	95
19 Heart Disease		9	19	33	35	34	27	18	17	21	22	34	21	25	36	19	21	193	198
20 Other diseases of the circulatory system		2	...	1	2	2	2	...	2	5	4	2	2	4	3	...	2	16	17
21 Bronchitis.....		3	3	5	9	2	11	8	2	3	8	5	10	7	4	4	7	37	54
22 Pneumonia		9	2	4	7	2	3	3	4	6	3	5	3	4	3	9	2	42	27
23 Other respiratory diseases		2	...	...	2	1	2	2	1	1	1	3	5	1	1	1	1	11	13
24 Ulcer of stomach or duodenum ...		2	2	2	...	3	1	1	...	1	1	1	1	1	...	2	...	13	5
25 Diarrhoea under 2 years		1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	1
26 Appendicitis		2	...	1	1	...	...	...	...	...	...	...	1	...	...	...	...	3	2
27 Other digestive diseases .....		...	2	3	...	4	3	...	6	3	1	1	2	2	1	3	...	16	15
28 Nephritis		2	1	1	2	11	14	2	2	7	5	5	3	5	3	...	4	33	34
29 Puerperal and post-abortion sepsis...		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
30 Other maternal causes .....		...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	2
31 Premature Birth		3	1	5	1	2	2	...	1	...	1	5	1	...	1	1	...	16	8
32 Congenital Malformation, Birth inj : infant : dis :		1	2	1	3	6	3	...	2	2	...	...	...	9	1	1	2	20	13
33 Suicide .....		...	...	1	...	2	...	1	...	1	...	2	...	2	...	1	1	10	1
34 Road traffic accidents		1	1	5	...	2	1	6	1	1	...	5	...	3	1	4	...	27	4
35 Other violent causes		1	1	6	2	6	3	2	2	5	2	7	1	1	2	9	6	37	19
36 All other causes		7	9	12	12	8	13	8	9	9	6	17	24	11	9	14	11	86	93
Deaths of Infants under 1 year	{ Total ...	6	3	8	4	9	6	3	4	4	4	7	1	10	4	3	4	50	30
	{ Legitimate ...	5	3	8	4	8	6	3	4	3	4	6	1	9	3	3	4	45	29
	{ Illegitimate ...	1	...	...	...	1	...	...	...	1	...	1	...	1	1	...	...	5	1
For calculation of Live Births—																			
(a) Infant & Maternal Mortalities	{ Total ...	82	65	140	131	129	135	88	83	130	115	146	144	118	119	73	96	906	888
	{ Legitimate ...	79	61	135	127	122	131	85	83	128	108	137	131	113	112	69	92	868	845
	{ Illegitimate ...	3	4	5	4	7	4	3	...	2	7	9	13	5	7	4	4	38	43
(b) Birth Rate	{ Total ...	75	57	127	120	115	124	80	80	116	103	141	136	102	101	67	90	823	811
	{ Legitimate ...	72	53	122	116	108	120	77	80	114	96	132	123	97	94	63	86	785	768
	{ Illegitimate ...	3	4	5	4	7	4	3	...	2	7	9	13	5	7	4	4	38	43
For calculation of Stillbirths—																			
(a) Maternal Mortalities	{ Total ...	1	3	10	1	5	3	3	3	6	1	2	3	1	1	3	2	31	17
	{ Legitimate ...	1	3	10	1	5	3	3	3	5	1	1	3	1	1	3	1	29	16
	{ Illegitimate ...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	1	2	1
(b) Stillbirth Rate	{ Total ...	...	3	8	1	5	3	3	3	6	1	2	3	1	1	3	2	28	17
	{ Legitimate ...	...	3	8	1	5	3	3	3	5	1	1	3	1	1	3	1	26	16
	{ Illegitimate ...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	1	2	1

CAUSES OF DEATH AT DIFFERENT PERIODS OF LIFE IN THE ADMINISTRATIVE COUNTY OF NORTHAMPTON.

CAUSES OF DEATH.	Sex.	AGGREGATE OF URBAN DISTRICTS							AGGREGATE OF RURAL DISTRICTS						
		All Ages	0—	1—	5—	15—	45—	65—	All Ages	0—	1—	5—	15—	45—	65—
1 Typhoid and paratyphoid fevers ...	M. F.	...	...	...	...	...	...	...	...	...	...	...	...	...	...
2 Cerebro-spinal fever	M. F.	3 3	...	1	...	...	1 1	1	2	...	1	...	...	1	...
3 Scarlet Fever	M. F.	...	...	...	...	...	...	...	...	...	...	1	...	...	...
4 Whooping Cough	M. F.	2 3	2	...	...	...	...	...	4 4	1 1	3 3	...	...	...	...
5 Diphtheria	M. F.	1 3	...	1	...	...	...	...	4 3	...	2 2	2	...	...	...
6 Tuberculosis of respiratory system	M. F.	38 36	...	...	...	24 27	12 5	2 3	12 20	...	...	1	6 12	5 6	...
7 Other forms of Tuberculosis.....	M. F.	10 8	...	1	2	5	2 1	...	6	...	3	...	1	1	...
8 Syphilitic Diseases	M. F.	8	...	...	...	1	5	2	5	...	...	...	...	2	3
9 Influenza	M. F.	14 7	...	...	...	5 1	3 3	6 3	12 11	...	1	...	2	5 4	...
10 Measles	M. F.	2 3	...	...	2	...	...	...	2	...	1	...	1	...	...
11 Acute polio-myelitis and polio- encephalitis	M. F.	...	...	...	...	...	...	...	...	...	...	...	...	...	...
12 Acute Infantile Encephalitis	M. F.	1 3	...	...	...	1 2	...	...	1 1	...	...	...	1	...	...
13 Cancer of buc : cav : and œsoph : (M), uterus (F).	M. F.	12 17	...	...	...	...	4 8	8 9	13 18	...	...	...	...	4 9	...
14 Cancer of stomach and duodenum	M. F.	26 25	...	...	...	2 1	8 7	16 17	29 19	...	...	...	...	11 8	...
15 Cancer of Breast	M. F.	...	...	...	...	...	...	...	1	...	...	...	...	...	...
16 Cancer of all other sites	M. F.	58 65	...	...	1	4 5	18 17	35 40	55 73	...	...	...	1	20 27	...
17 Diabetes	M. F.	5 5	...	...	...	3	...	2 4	6 16	...	...	...	...	...	...
18 Intra-cranial vascular lesions	M. F.	83 107	...	...	...	1	12 20	70 86	74 95	...	...	...	...	13 19	...
19 Heart Disease	M. F.	164 178	...	...	...	7 9	31 20	126 149	193 198	...	...	...	5 5	36 22	...

TABLE II. (continued).
CAUSES OF DEATH AT DIFFERENT PERIODS OF LIFE IN THE ADMINISTRATIVE COUNTY OF NORTHAMPTON.

CAUSES OF DEATH.	Sex.	AGGREGATE OF URBAN DISTRICTS							AGGREGATE OF RURAL DISTRICTS						
		All Ages	0—	1—	5—	15—	45—	65—	All Ages	0—	1—	5—	15—	45—	65—
20 Other diseases of the circulatory system.....	M. F.	10 9	...	...	1	...	...	9 8	16 17	...	...	...	...	...	16 14
21 Bronchitis.....	M. F.	48 41	6 1	...	...	2 2	12 8	28 29	37 54	1 1	...	...	...	7 10	29 42
22 Pneumonia	M. F.	49 36	11 3	3 2	...	7 2	14 9	14 19	42 27	9 5	2 1	1 ...	3 4	9 4	18 13
23 Other respiratory diseases	M. F.	10 14	...	...	...	...	4 2	6 9	11 13	...	...	...	1 1	5 5	5 7
24 Ulcer of stomach or duodenum ...	M. F.	10 1	...	...	...	2 ...	5 ...	3 1	13 5	...	...	...	1 1	7 1	5 3
25 Diarrhoea under 2 years	M. F.	1 1	1 1	...	...	...	...	...	1 1	1 1	...	...	...	...	...
26 Appendicitis	M. F.	3 4	...	1 ...	...	1 1	1 1	...	3 2	...	...	1 ...	...	1 1	1 ...
27 Other digestive diseases	M. F.	21 19	1 4	...	...	3 2	7 5	10 8	16 15	...	2 1	1 1	4 1	3 4	6 8
28 Nephritis	M. F.	28 23	...	...	1 1	5 4	5 9	17 9	33 34	...	...	...	3 3	10 6	20 23
29 Puerperal and post-abortion sepsis...	F.	2	...	...	...	2	...	...	...	...	...	...	...	...	...
30 Other maternal causes	F.	3	...	...	...	3	...	...	2	...	...	...	2	...	...
31 Premature Birth	M. F.	20 13	20 13	...	...	...	...	...	16 8	16 8	...	...	...	...	...
32 Congenital Malformation, Birth inj : infant : dis :	M. F.	13 20	10 18	...	...	1 1	1 1	...	20 13	18 11	1 ...	...	1...	...	...
33 Suicide	M. F.	8 4	...	...	...	1 2	2 2	5 ...	10 1	...	...	...	1 1	6 ...	3 ...
34 Road traffic accidents	M. F.	15 5	...	1 2	...	6 1	3 1	4 1	27 4	...	...	4 ...	9 2	9 ...	5 2
35 Other violent causes	M. F.	26 10	...	...	1 2	9 2	6 3	10 2	37 19	2 3	2 2	5 1	11 3	7 3	10 7
36 All other causes	M. F.	82 67	1 3	1 ...	...	11 7	10 15	59 39	86 93	2 ...	3 1	2 4	9 8	15 17	55 63
ALL CAUSES	M. F.	771 755	52 50	9 17	10 12	101 83	166 150	433 443	787 790	50 30	21 13	17 7	60 60	177 162	462 518

CASES OF INFECTIOUS DISEASE NOTIFIED DURING THE YEAR 1941.
(53 weeks ended 3rd January, 1942)

TABLE III.

DISEASES.	URBAN DISTRICTS.												RURAL DISTRICTS.								Totals for Administrative County			
	Brackley (Borough)	Daventry (Borough)	Higham Ferrers (Boro')	Kettering (Borough)	Burton Latimer	Corby	Desborough	Irthlingborough	Oundle	Raunds	Rothwell	Rushden	Wellingborough	Totals for Combined Urban Districts	Brackley	Brixworth	Daventry	Kettering	Northampton	Oundle and Thrapston		Towcester	Wellingborough	Totals for Combined Rural Districts
†Small Pox ...	6	7	6	93	8	29	5	8	2	13	5	38	21	241	25	30	34	12	37	16	21	9	184	425
†Scarlet Fever ...	—	5	—	15	—	8	—	—	6	—	—	1	9	44	10	11	14	6	22	—	14	2	79	123
†Diphtheria ...	—	—	—	12	—	1	—	—	—	—	—	2	3	19	29	29	2	1	2	—	—	—	35	54
†Enteric Fever ...	1	—	—	16	1	—	—	—	—	4	—	18	13	54	—	2	3	1	1	5	1	6	19	73
†Erysipelas ...	3	2	—	29	13	—	—	—	1	9	—	2	3	12	5	4	11	1	1	36	2	23	19	31
†Puerperal Pyrexia ...	7	1	7	2	—	—	—	11	—	—	—	87	15	180	5	15	7	13	41	36	23	7	147	327
†Pneumonia ...	—	—	2	7	—	1	—	—	—	1	—	—	8	20	—	—	3	1	2	4	—	—	5	7
Ophthalmia Neonatorum ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	—	—	—	8	28
Cerebro-Spinal Fever ...	—	—	5	56	5	2	1	9	—	2	3	15	23	125	2	7	15	4	21	13	12	9	83	208
Tuberculosis of the Respiratory System ...	—	1	1	8	1	2	—	1	—	—	—	5	11	30	4	4	4	1	4	4	2	4	27	57
Other Forms of Tuberculosis ...	—	—	—	—	—	—	—	—	—	—	1	—	—	1	—	1	—	1	—	—	—	—	2	3
Acute Poliomyelitis ...	—	—	—	1	—	—	—	—	—	—	—	—	—	1	—	—	—	—	1	—	—	—	1	2
Encephalitis Lethargica ...	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	55	—	—	—	76	77
Dysentery ...	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	21	—	—	—	—	—	—
Malaria (believed to have been contracted abroad)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
†Measles ...	7	21	31	795	36	156	265	5	35	7	210	140	210	1918	157	262	350	344	201	553	421	70	2358	4276
†Whooping Cough ...	5	2	27	177	37	43	16	10	—	30	60	119	139	665	51	98	72	81	108	89	218	82	799	1464
Polio-encephalitis ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	1	1
Totals ...	29	43	79	1213	101	242	291	44	44	66	279	427	455	3313	256	457	515	487	499	720	714	189	3843	7156

(Para-typhoid 449)

† The notifications shewn in respect of these diseases are as furnished by the Registrar-General the remaining notifications shewn on the table are compiled from the weekly Returns of the District Medical Officers of Health.

